

# PROCEEDINGS

## AMERICAN SOCIETY OF CIVIL ENGINEERS

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### FEDERAL PARTICIPATION IN SMALL- CRAFT HARBORS

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WATERWAYS DIVISION

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## FEDERAL PARTICIPATION IN SMALL- CRAFT HARBORS

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Any Federal participation in the construction of small-craft harbors must be authorized by the United States Congress. Briefly described, the process leading up to such action is as follows: To satisfy a local need as expressed through your representatives, the Congress authorizes an examination for the desired improvement. The proper department of the Government then submits a report to Congress, with a recommendation for or against such improvement. If favorably recommended, the Bureau of the Budget studies the total cost, the benefit-cost ratio and the proportion of the cost to be borne by the United States. It then reports to the Congress whether authorization of the improvement would be in accord with the President's program. Finally, the Congress, if favorable, authorizes the improvement as a Federal project. Current economic conditions and the priority of projects, with the purpose of selecting those yielding the greatest value to the nation, govern the actual appropriation of funds for initiation of construction.

The Corps of Engineers, Department of the Army, undertakes authorized examinations looking to the construction, repair and preservation of certain public works on rivers and harbors. The Chief of Engineers assigns the examination to the District Engineer having jurisdiction in the area where the improvement is desired.

The District Engineer then makes a "preliminary examination" of the proposed improvement and submits a report thereon to the Chief of Engineers. This report is based on such data as is readily available and includes discussion whether the improvement is needed and appears to be justified or is not justified at this time. When it appears that detailed analysis, if undertaken, would undoubtedly result in rejection of the improvement, the District Engineer submits an unfavorable report and in most instances this completes the action taken on that Congressional request.

On the other hand if the preliminary examination indicates that close scrutiny and evaluation will be likely to show justification for the improvement, the District Engineer makes a favorable report to the Chief of Engineers in which he recommends that a report of "survey" scope be authorized.

A survey report goes into detail on the physical aspects and economics of the improvement. It explores the effects of the proposed improvement on the shoreline and on other improvements, existing or proposed. It estimates the cost including maintenance and damages, if any, and it evaluates the benefits insofar as possible. The benefits and costs are reduced to an annual value and the ratio of benefits to costs determined by dividing the benefits by the costs. If this ratio is less than unity the improvement lacks economic justification and except in rare cases this leads to an unfavorable report. This

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indicates the importance that the economic analysis plays in getting a project authorized.

In 1932, an adopted amendment to the River and Harbor Act of 1902 modified the term "commerce" as defined in the earlier act to "include the use of waterways by seasonal passenger craft, yachts, house boats, fishing boats, motor boats and other similar craft whether or not operated for hire." This was the first authority for considering recreational boats as contributing to the monetary benefits of proposed harbors.

The basic criterion in the allocation of project costs has always been to divide them equitably among the purposes to be served. As currently stated in the 1955 budget message of the President, "to the greatest extent possible, the responsibility for resource development and its cost, should be borne by those who receive the benefits." Guided by these general policies, the head of the agency responsible for the examination of a project determines the tentative allocation of costs.

In small-boat harbor and channel reports prepared prior to 1950, each District Engineer, guided only by general regulations, developed methods which in his judgment indicated the proper amount of local cooperation to be required and made his recommendation accordingly. This resulted in a variety of procedures with the appearance of inconsistencies, when reviewed by the Congress, and pointed-up the desirability of a uniform method, first for determining the value of monetary benefits to be expected from small-boat harbors and then for equitably allocating the costs for such projects as Federal and non-Federal responsibilities.

In February 1950 and by minor modification in March 1951,<sup>2</sup> the Office, Chief of Engineers, established a uniform method for evaluating and allocating the expected benefits and costs for small-boat harbors. The Bureau of the Budget has indicated its approval of this so-called small-boat formula and has approved projects based on this procedure. In general, the present policy requires that local interests pay 50 per cent of the average annual cost of small-boat harbors, exclusive of self-liquidating features. Usually benefits other than recreational will change the ratio of first costs.

Incidentally, there is also an apparent trend by Congress at this time, to require a favorable benefit-cost ratio, based upon current review, to justify Federal maintenance costs as they develop.

A review of the small-craft harbors, existent and authorized, within the Los Angeles district of the Corps of Engineers, will serve to illustrate some of the various ways that the Federal Government participates or proposes to participate in the construction or maintenance of small-craft harbors.

#### Morro Bay Harbor

At Morro Bay, in San Luis Obispo County, a small-craft harbor was requested by local interests and a survey report completed in 1940. Prior to project authorization, the United States Navy requested its construction, utilizing Navy funds, for a patrol base. The harbor was later used for amphibious training and as a Coast Guard base. In 1945, the harbor was authorized by Congress as a Civil Works project. This authorization was based on the the 1940 Survey Report as modified to meet the requirements of the Navy.

2. Vol. 1, Hearings before the Subcommittee on Rivers and Harbors of the Committee on Public Works, House of Representatives, 83d Congress on H.R. 9859, p. 347, Washington; 1954 Rivers and Harbors Omnibus Bill.

Construction was completed in 1945, using Civil funds. In this case, local interests provided the rights-of-way, access roads and facilities for mooring and servicing small craft.

#### Santa Barbara Harbor

At Santa Barbara a public benefactor who lived in nearby Montecito and owned a yacht, donated the funds to the city to construct a breakwater, thereby creating a harbor for small craft. A recurring shoaling problem in this harbor prompted request to the United States for maintenance help. A favorable report resulted in adoption by Congress of a project for maintenance of the depths into the harbor. Subsequently another report recommended contribution to the city toward operation of a fixed sand bypassing plant to be installed by the city at its own expense. Congress authorized this modification but the plant has not as yet been provided by the city, so the original maintenance program still prevails.

#### Proposed Redondo Beach Harbor

The City of Redondo Beach in 1939 using city funds, raised by bond issue, and a contribution by the Federal Emergency Administration of Public Works built a stone breakwater about 2,400 feet long which offered partial protection for a limited number of boats and complicated a beach erosion problem below the partially sheltered area by interfering with replacement of beach losses by natural processes. A survey report recommended a 2,800-foot extension of the existing breakwater and construction of a 700-foot long complementary breakwater from shore, the Federal Government to pay for construction of the new breakwaters. Local interests were to donate the existing breakwater, and were required to build a quay wall within the harbor, to dredge and maintain a minimum depth of 12 feet within the harbor, to create fills and restore the eroded beach and provide facilities for small-craft mooring, supply and maintenance. Congress authorized this project in 1950. In the current fiscal year, Federal funds were allotted for advance planning and engineering studies, which are under way in the office of the District Engineer.

#### Proposed Playa del Rey Harbor

In the 1954 River and Harbor omnibus bill, Congress authorized participation in the construction of a small-craft harbor at Playa del Rey near Los Angeles. The recommended plan of improvement shows an entrance channel 20 feet deep flanked by jetties, a large central basin 10 and 20 feet deep and a dozen side basins of varying size surrounding the central basin. The estimated capacity is 8,000 boats. As authorized, the Federal share of the cost was limited to not more than one-half the cost of the general navigation features. On this basis and using the latest revised estimate, the cost to the Federal Government would now be about \$4,000,000 and to local interests about \$29,000,000.

#### Newport Bay Harbor

The people of Newport Beach and vicinity built a small-craft harbor at their own expense. Their efforts to get a favorable report and some help from the United States had been unsuccessful. However, in a report by the

Chief of Engineers to the Secretary of the Army in September 1933, it was stated that the improvement of Newport Bay as a navigation project was not deemed advisable but that as a measure to relieve unemployment and with a local contribution of one-half the cost it should receive favorable consideration. This was authorized by the Public Works Administration in June 1934. As a result, the jetties were extended, the entrance channel improved and other channels and areas dredged at a total cost of about \$1,600,000 with the Federal Government and local interests each standing one-half the cost.

Subsequently Congress authorized maintenance of the existing channels, dredged areas and jetties at Federal expense and later authorized further deepening of areas and channels within the bay upon the condition that local interests contribute \$255,000 toward the cost. This dredging has not yet been accomplished.

#### Mission Bay Harbor

In 1945, the City of San Diego gained possession of the tide and submerged land in Mission Bay and desired to improve the area into a small-craft harbor and water recreation area. Their representatives in Congress got authority for a report by the Corps of Engineers. One of the first Federal navigation improvements to be authorized in the Los Angeles district was an earthen dike built in 1876 to permanently divert the San Diego River, when it flowed, from San Diego Bay into False (Mission) Bay. It was apparent that complete control of the river to the sea was essential before improvement of Mission Bay could be justified. As a result a multi-purpose project was recommended. The flood control part of the project included a floodway from the river gorge to the ocean and modification of a railroad bridge, the entire construction cost of which was to be borne by the United States. Cost of modification of old and construction of new highway bridges as well as side drainage structures was allocated to local interests. For the navigation part of the project, the cost of construction of the three jetties for the river mouth and navigation entrance (the middle jetty being common to both) was borne by the United States. Also, to be done at Federal expense was the dredging of the entrance channel and other basins to a depth of 20 feet. The remainder of the project including all the interior channels and basins is to be at local expense. In accordance with usual custom, the furnishing of all land and rights-of-way and the agreement to hold and save the United States free from any claim for damages was the responsibility of local interests.

#### Proposed Alamitos Bay Harbor

The small-boat harbor at Alamitos Bay in Long Beach was also the subject of a favorable survey report by the District Engineer. His estimated first cost based upon the recommended plan of improvement was a little more than \$8,000,000. His recommended allocation of this cost was \$2,800,000 to the United States and about \$5,200,000 to local interests. While the report was still under consideration by the Board of Engineers for Rivers and Harbors the people of Long Beach decided to build the harbor at their own expense and it is now under construction by the city.

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